

## **SPECIFICATION**

No. ISA3932C

Date. August.8, 2023

XN SERIES EMERGENCY STOP
PUSHBUTTON SWITCH
TYPE XN4E—LL4□■Q4△R (Illuminated Switch)

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Contact arrangement

- Terminal style

1. Applicable standard JIS C 8201-5-1, JIS C 8201-5-5

IEC60947-5-1, EN60947-5-1

IEC60947-5-5

EN60947-5-5 (TUV Approval) UL508, UL60947-5-5 (UL Listing)

UL991, NFPA79

CSA C22.2 No.14, IEC60947-5-5 (c-UL Listing)

GB/T14048.5(CCC Certified)

2. Operating conditions

(1) Ambient temperature -25 to +55°C (no freezing)
 (2) Relative humidity 45 to 85% (no condensation)
 (3) Storage temperature -45 to +80°C (no freezing)

(4) Pollution degree 3

3. Contact ratings

(1) Rated insulation voltage(2) Thermal current5A

(3) Rated operating voltage

and rated operating current

Main contact (NC contact), Monitor contact (NO contact)

|                              | Rated ope       | ratir | 30V                   | 125V | 250V  |      |
|------------------------------|-----------------|-------|-----------------------|------|-------|------|
|                              |                 | Α     | Resistive load (AC12) | -    | 5A    | 3A   |
| Rated operating current (Ie) | Main contact    | С     | Inductive load (AC15) | -    | 3A    | 1.5A |
|                              |                 | D     | Resistive load (DC12) | 2A   | 0.4A  | 0.2A |
|                              |                 | С     | Inductive load (DC13) | 1A   | 0.22A | 0.1A |
|                              |                 | Α     | Resistive load (AC12) | -    | 1.2A  | 0.6A |
|                              | Monitor contact | С     | Inductive load (AC14) | -    | 0.6A  | 0.3A |
|                              |                 | D     | Resistive load (DC12) | 2A   | 0.4A  | 0.2A |
|                              |                 | С     | Inductive load (DC13) | 1A   | 0.22A | 0.1A |

 The operating current is classified according to the JIS C 8201-5-1 making and breaking current capacities.

(4) Minimum applicable load (reference value) 5V AC/DC, 1mA (Subject to operating conditions and load types.)

## 4. LED illuminated unit ratings

(1) Rated insulation voltage 60V

(2) Rated voltage 24V AC/DC

(3) Operating voltage  $24V\pm10\%$  AC/DC

(4) Thermal current 5mA

5. Constructions

(1) Outside view See attached sheet

(2) Operation type Push lock turn reset with lockout by padlock

(3) Degree of protection Operater: IP65 (IEC60529)

Terminal:IP20(When XW9Z-VL2MF is installed)

(4) Contact arrangement - ( $\square \blacksquare$ ) 1b(01), 2b(02), 3b(03), 4b(04), 1a-2b(12)

(□: monitor contact ■: main contact) 1a-3b(13), 2a-2b(22)

(5) Button style and color Mushroom ( $\phi$  44 button), Red

(6) Terminal style − (△) M3 screw terminal / IP20type (MF),

M3 screw terminal / with terminal cover type (M)

(7) Connectable cable 0.75 to 1.25mm² maximum (AWG 18 to 16)

(8) Panel thickness 1 to 6mm (9) Panel cut-out  $\phi$  30.5  $^{+0.5}$ mm (10) Locking ring torque tightening 2.5 N·m (11) Weight Approx. 120g

6. Characteristics

(1) Contact resistance
 (2) Operation force
 50m Ω minimum (initial value)
 Push lock: 32N, Turn reset:0.4N·m

(3) Minimum force required for direct opening action 80N

(4) Minimum operator stroke required for direct opening action 4.0mm

(5) Maximum operator stroke 4.5mm

(6) Insulation resistance  $100M \Omega$  maximum (measured with a 500V DC megger)

(7) Impulse withstand voltage 2.5kV (illumination department: 0.8 kV)

(8) Over voltage category II

(9) Vibration resistance

(a) Operating extremes Frequency 10 to 500Hz, Amplitude 0.35mm Acceleration 50m/s²
(b) Damage limits Frequency 10 to 500Hz, Amplitude 0.35mm Acceleration 50m/s²

(10) Shock resistance

(a) Operating extremes  $150 \text{ m/s}^2$  (b) Damage limits  $1000 \text{ m/s}^2$ 

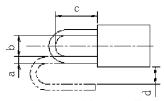
(11) Short-circuit protective device 10A, 250V fuse (Type aM IEC60269-1 / IEC60269-2)

(12) Conditional short-circuit current 1000A

(13) Padlock and Hasp for weight and size

(a) Padlock size

| a          | 7 mm maximum  |  |
|------------|---------------|--|
| ь          | 19 mm minimum |  |
| С          | 39 mm minimum |  |
| d<br>note1 | 15 mm minimum |  |



Note 1) Dimension d is 6mm or more when attaching a padlock from the side of a switch.

| (b) | Recommended Hasp |
|-----|------------------|
|-----|------------------|

| Manufacture   | Type              |
|---------------|-------------------|
| Shinwa Co,Ltd | SHH002            |
| PANDUIT corp. | PSL-HD3<br>PSL-1A |
| Master Lock   | 420, 421          |

(c) The total weight of the padlock and hasp 1500g maximum

## 7. Life

(1) Mechanical life (without load) 250,000 operation minimum

(Operating frequency: 900 operations/hour maximum )

(2) Electrical life

(a) Rated load 100,000 operation minimum

(Operating frequency: 900 operations/hour maximum)

(b) When the load is 24V · 100mA AC/DC

250,000 operation minimum

(Operating frequency: 900 operations/hour maximum )